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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,958	03/26/2001	Qiming Chen	10006528-1	9842

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EXAMINER	
REFAI, RAMSEY	
ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/817,958	Applicant(s) CHEN ET AL.	
	Examiner Ramsey Refai	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Responsive to Amendment received on August 19, 2005. Claims 10 and 13 have been amended.

Claims 1-20 remain pending further examination.

Response to Arguments

1. Applicant's arguments filed August 19, 2005 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear *how* the system addresses an "interface diversity problem". Merely stating that a system addresses a problem and not clearly explaining *how* renders the claim vague and indefinite. Examiner advises the Applicant to delete the limitation "*to address an interface diversity problem*" from claim 15 or amended the claim to further explain in detail how the interface diversity problem is addressed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 and 6-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kapil et al (U.S. Patent No. 6,941,345)

6. As per claim 1, Kapil et al teach a method for enabling communication between a first agent in a first domain and a second agent in a second domain, the first domain having a first domain coordinator and a first domain service bus and the second domain having a second domain coordinator and a second domain service bus (**Figure 1**), the method comprising:

- a) registering the first domain coordinator with the second domain service bus without registering the first agent (**column 3, lines 10-30, column 4, lines 29-50; service providers of different communities communicate to achieve messaging without the need for a client in one community to register at another community's service provider**); and
- b) providing communication between the second agent and the first agent via the second domain service bus, the first domain service bus and the first domain coordinator (**column 4, lines 50-55**).

7. As per claim 2, Kapil et al teach:

- i) providing a client-side interface for a send-message service that can be employed by other agents in a different domain to communicate with the first agent (**column 8, lines 48-67**); and
- ii) employing the client-side interface for the send-message service to facilitate communication between the second agent and the first agent (**column 8, lines 48-67**).

8. As per claim 3, Kapil et al teach:

- i) directing a message from the second agent to the first domain coordinator, which serves as a point of presence for the first agent (**column 4, lines 50-55, column 3, lines 10-31**);
- ii) the first domain coordinator receiving the message and forwarding the message to the first agent (**column 5, lines 40-55**).

9. As per claim 4, Kapil et al teach wherein the first domain coordinator is a point-of-presence for communication directed to the first agent by agents external to the first domain (**column 3, 10-30, column 4, lines 50-55**).

10. As per claim 6, Kapil et al teach wherein the second domain service bus is an HTTP service bus (**column 3, lines 32-40**).

11. As per claim 7, Kapil et al teach wherein the second domain service bus provides one or more of dynamic firewall transversal services, access control services, security services, billing services, authentication services, authorization services, or other predefined infrastructure services (**column 5, lines 37-55**).

12. As per claim 8, Kapil et al teach wherein the coordinator provides one or more of naming services, resource directory services, or send-messages service (**column 8, lines 48-67**).

13. As per claim 9, Kapil et al teach:

invoking the send-message service, wherein the send-message service is provided by the second domain service bus (**column 8, lines 48-67**); and

employing a local naming service to forward the message to the first agent (**column 5, lines 37-55**).

14. As per claim 10, Kapil et al teach wherein invoking the send message service comprises specifying a domain name and receiver agent name (**column 8, lines 33-67, column 4, lines 50-55**).

15. As per claim 11, Kapil et al teach wherein the first agent and the second agent communicate in a publish and subscribe mode (**column 1, lines 30-50, column 3, lines 40-62**).

16. As per claim 12, Kapil et al teach wherein the first domain is a first enterprise and the second domain is a second enterprise (**column 3, lines 3-8, Figure 1**).

17. As per claim 13, Kapil et al teach a system for enabling communication between agents in different domains comprising:

- a) a first domain service bus in a first domain and a second domain service bus in a second domain for providing infrastructure services (**Figure 1**);
- b) a first domain coordinator in a the first domain having a send-message service that is registered with the second domain service bus without having the first agent registered with the second domain service bus (**column 3, lines 10-30, column 4, lines 29-50; service providers of different communities communicate to achieve messaging without the need for a client in one community to register at another community's service provider**); and
- e) a first agent in the first domain and a second agent in the second domain, wherein the second agent sends a message directed to the first agent by employing the send-message service of the first domain coordinator (**column 8, lines 48-67**), wherein the first domain coordinator provides a point-of-presence gateway for receiving messages directed to the first agent and forwarding the message to the first agent (**column 4, lines 50-55, column 3, lines 10-31**).

18. As per claim 14, Kapil et al teach delivering messages between agents based on service invocation and the infrastructure services, and wherein the system does not require a centralized coordinator (**Figure 1**).

19. As per claim 15, Kapil et al teach wherein the first agent communicates a plurality of messages with the second agent across domains by invoking the send-message service, and wherein the system provides a point-of-presence approach to address an interface diversity problem (**column 8, lines 48-67**).

20. As per claim 16, Kapil et al teach wherein the first agent is required to keep only a client-side interface of the first domain coordinator in order to communicate with other agents in the first domain (**column 1, lines 30-50**).

21. As per claim 17, Kapil et al teach wherein no other send-message service need be registered with the second domain service bus to enable agents external to the first domain to communicate with every agent in the first domain (**column 8, lines 48-67**).

22. As per claim 18, Kapil et al teach a method for enabling inter-enterprise agent communication comprising the steps of:

- a) grouping agents into a first group in a first domain having a first domain service bus and grouping agents into a second group in a second domain having a second domain service bus (**Figure 1, column 3, lines 3-31**);

- b) assigning a coordinator to the agents in the first group (**column 3, lines 10-30, column 4, lines 29-50**);
- c) registering a send-message service of the coordinator with the second domain service bus without registering agents in the first group (**column 3, lines 10-30, column 4, lines 29-50; service providers of different communities communicate to achieve messaging without the need for a client in one community to register at another community's service provider**);
- d) the coordinator receiving messages from the second domain; wherein the messages are directed to a one of the agents in the first group (**column 4, lines 50-55, column 5, lines 37-55**); and
- e) the coordinator forwarding the messages to an intended recipient agent; wherein the second domain service bus provides inter-enterprise communication services between the first domain and the second domain (**column 4, lines 50-55, column 3, lines 10-31**).

23. As per claim 19, Kaplin et al teach wherein the first domain is disposed in a first enterprise and the second is disposed in a second enterprise (**column 3, lines 3-8, Figure 1**).

24. As per claim 20, Kaplin et al teach wherein the second domain service bus provides one or more of dynamic firewall transversal services, access control services, security services, billing services, authentication services, authorization services, or other predefined infrastructure services (**column 5, lines 37-55**).

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kapil et al (U.S. Patent No. 6,941,345) in view of Chang Liu (hereinafter Liu) “Platform-Independent and Tool-Neutral Test Descriptions for Automated Software Testing”, 2000, ACM, pages 713-715.

27. As per claim 5, Kaplin et al fail to teach a method wherein the service bus is the E-speak service bus.

28. However, Liu teach the use of E-speak technology (**Abstract**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Kapil et al and Liu to create a method that uses a bus with E-speak technology because doing so would reduce the time and effort to produce e-services with a common operating environment in which to conduct business.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Chang et al (U.S. Patent No. 5,974,449).

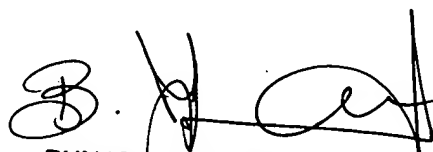
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Refai
Examiner
Art Unit 2152

RR 
November 10, 2005


BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER